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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

November 8, 2000

By HAND DELIVERY

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
The Portals – TW-A325
445 Twelfth Street, S.W.
Washington, D.C. 20554

Re: *Ex Parte Communication – Wireless Telecommunications Bureau Seeks Comment on Broadwave Albany, L.L.C., et al. Request for Waiver of Part 101 Rules, Public Notice, DA 99-494 (rel. Mar. 11, 1999)*

Ex Parte Communication – Amendment of Parts 2 and 25 of the Commission's Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku-Band Frequency Range and Amendment of the Commission's Rules to Authorize Subsidiary Terrestrial Use of the 12.2-12.7 GHz Band by Direct Broadcast Satellite Licensees and Their Affiliates, ET Docket No. 98-206, Notice of Proposed Rulemaking, FCC 98-310 (rel. Nov. 24, 1998)

Dear Ms. Salas:

EchoStar Satellite Corporation ("EchoStar") and DirecTV, Inc. ("DIRECTV") (collectively, the "DBS Operators") jointly submit this letter to provide the Commission with additional information showing that the 10% unavailability increase limit adopted recently by the International Telecommunication Union ("ITU") for interference into DBS operations applies fully, not only to non-geostationary satellite ("NGSO") systems, but also to the proposal of Northpoint Technology and its affiliates (collectively "Northpoint") to use the band.

In brief, the recent ITU actions regarding interference from NGSO systems into DBS were *explicitly* premised on a decision of the ITU about the level of performance and quality of service needed by DBS systems and the amount of decrease in this quality that DBS operators can be asked to accept. The ITU specifically found that a DBS operator "should be able to control the overall performance of a network, and to provide a quality of service that meets its C/N performance objectives," and that, to allow this, "there needs to be a limit on the

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aggregate interference a network must be able to tolerate from emissions *of all other networks*.”¹ A decision of the Commission that Northpoint is not subject to the 10% cap on aggregate unavailability increase, as Northpoint contends, would directly interfere with these ITU findings, since the DBS operators would not be able to ensure the level of performance and quality of service that was the explicit basis of the ITU actions. Indeed, to preserve that level of protection would require an international renegotiation of the power flux density limits on NGSO systems that were embedded in a recent ITU rule – a rule binding on the United States by international treaty. In addition to the direct tension between the Commission decision requested by Northpoint and the ITU findings, these findings (including the level of service quality required for DBS) were not only supported but actually championed by the United States. A Commission decision to undermine them would deal a severe blow to US faith and credibility in the most important international communications forum.

The relevant ITU actions are Recommendation ITU-R BO.1444 and RR Article S22, both passed only months ago in the World Radiocommunication Conference of 2000. The immediate *result* of these actions was to derive a limit on the interference that NGSO systems could permissibly cause to DBS operations and to determine resulting power flux density limits on NGSO systems operating in the DBS band. Northpoint relies on a narrow reading of this *result* for its argument that these actions apply only to NGSO systems and that, therefore, the Commission can freely accommodate, at Northpoint’s pleasure, Northpoint’s avowed intention to cause additional interference to DBS systems beyond the 10% aggregate cap adopted by the ITU.

This reading ignores the basis of the ITU actions, however. These actions were based on an ITU decision about the needed performance objectives of DBS systems and the level of erosion of this performance that DBS systems can be asked to accept. To conclude that this was the premise and goal of the ITU actions, one does not need to resort to inference or look to the deliberations underlying the actions. Rather, that premise was explicitly embedded in the ITU-voted documents, and close review of these documents will suffice to show the fallacy of Northpoint’s argument.

To reach the result (power limits for NGSO systems) on which Northpoint relies to persuade the Commission to ignore the ITU actions as irrelevant, the ITU went through a three-step process. **First**, it approved specific performance objectives for the DBS systems; then, **second**, it made a decision about how much erosion of those performance objectives would result in DBS system performance that is still acceptable from a quality of service standpoint; and finally, **third**, it developed power flux density levels for NGSO systems that preserve that DBS level of performance. All three of these determinations are *spelled out* in the ITU

¹ Recommendation ITU-R BO.1444, *considering further* (a) and (b) (emphasis added) (“ITU Recommendation”).

Recommendation. In the ITU's words, its actions were based on its findings: "that the BSS and associated feeder-link system designer should be able to control the overall performance of a network and to provide a quality of service that meets its C/N performance objectives;" and "that to allow an operator to exercise control over the quality of service, there needs to be a limit on the aggregate interference a network must be able to tolerate from emissions of *all other networks*."² The ITU further found that degradations to DBS performance and availability "may be due to propagation anomalies, other GSO networks and *other systems* including non-GSO FSS systems that share the same band."³

Based on these findings, the ITU recommended that the emissions of all NGSO systems should "be responsible for at most 10% of the time allowance(s) for unavailability of the given C/N value(s) as specified in the performance objectives of the desired network, where N is the total noise level in the noise bandwidth associated with the wanted carrier including all other non-time-varying sources of interference."⁴ Based in turn on this 10% unavailability increase criterion, the ITU adopted a rule setting forth power flux density limits for NGSO systems, RR Article S22.

Northpoint focuses on this result and ignores its explicit basis. If, however, the Commission were to hold that Northpoint is not subject to the 10% cap on aggregate unavailability increases, the result would be a DBS "quality of service" that does not meet the C/N "performance objectives" explicitly approved by the ITU, or (stated differently) an erosion of that quality by a level of interference more than "the aggregate interference a network must be able to tolerate from emissions of all other networks."⁵ Such a Commission decision would directly violate the ITU's findings.

As part of its argument that it is not subject to the 10% aggregate cap, Northpoint specifically contends that interference from Northpoint operations should be included as a "non-time varying source of interference" under the 10% formula – in other words, that any interference from Northpoint, no matter how serious, should simply be viewed as a "given" assumed away as part of the noise "floor" that DBS operators have to accept.⁶ That mechanical interpretation is shown to be incorrect if, again, the recommendation is read in light of its explicit

² ITU Recommendation, *considering further* (a) and (b) (emphasis supplied).

³ ITU Recommendation, *considering further* (j) (emphasis added).

⁴ ITU Recommendation, recommends 1.1.

⁵ See ITU Recommendation, *considering further* (a) and (b).

⁶ ITU Recommendation, recommends 1.1.

premise and goal – to preserve a stated level of DBS quality and performance and place a limit on how much erosion of that quality is acceptable. The only way to achieve that goal is to read the recommendation as referring to all *then extant* non-time varying sources of interference, not to new ones that are just added to the floor DBS systems are asked to accept and then assumed away. Otherwise, the ITU actions would become meaningless as they would fail to preserve the DBS performance and service quality levels whose preservation was the starting and ending point of the whole ITU exercise. Indeed, Northpoint perversely relies on the non-time varying nature of the interference it would cause to urge a more lenient treatment than that of NGSO systems, even though non-time varying sources of interference cause more serious problems, and are more difficult to manage, than interference sources of a time-varying nature.⁷

In addition to violating many of the ITU's findings, a Commission decision that Northpoint can take advantage of a more liberal interference standard would also cause direct tension with the *conclusion* of the ITU action – the NGSO power flux density limits, even if one were to accept the narrow focus of Northpoint on that conclusion. Specifically, if Northpoint were allowed to exceed the 10% cap on aggregate unavailability increase, the power flux density limits for NGSO systems set forth in RR Article S22 would no longer be adequate to ensure the level of DBS performance and quality that was the basis and goal of the ITU actions. Preserving that level of performance would require renegotiating the limits and amending the ITU rule to provide for more stringent ones. Even forgetting that such a Commission action would effectively invalidate an ITU rule binding on the United States by international treaty, such an action would be a serious blow for U.S. international credibility.⁸

⁷ In addition, the ITU went through great lengths to include “all possible combinations of each single degradation source” in its endeavor to ascertain the actual amount of interference inflicted on BSS providers. ITU Recommendation, Annex 2, (3) Detailed principle, *Step 1*. This total was then used to calculate the maximum amount of further unavailability the BSS systems and their millions of customers could reasonably withstand, 10-percent. Moreover, the Commission adopted an aggregate methodology for applying the 10-percent limit to assure that the overall increase in unavailability remains unchanged regardless of the number of future systems put into use. The Recommendation applies stricter power flux density limits as the number of interfering operators increases. Clearly the ITU Recommendation set a cap on the aggregate interference BSS operators must endure from *any* interference source.

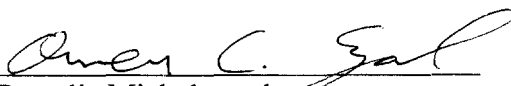
⁸ The ITU developed the unavailability cap and the corresponding 10-percent limit partially because it felt that “the integrity of the Plans in RR Appendices S30 and S30A and their future modifications is to be ensured.” ITU Recommendation, *considering* (p). Appendices S30 and S30A lay out criteria to protect the BSS networks and associated feeder links from interference that could increase unavailability. The integrity of the ITU Recommendation needs to be protected no less, and allowing Northpoint to circumvent the aggregate unavailability cap would at a minimum severely compromise that integrity.

Ms. Magalie Roman Salas
November 8, 2000
Page 5

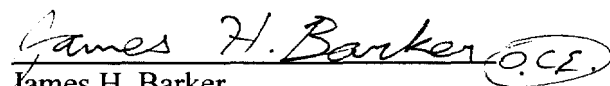
In brief, the Commission should apply the aggregate 10% cap to the proposed Northpoint operations. The Northpoint system under such a ruling would be bound to coordinate its operations with all NGSO systems to ensure they are not aggregately responsible for more than 10% of the total time allowances for unavailability and would similarly be barred from exceeding the 10% cap if no NGSO systems operate in the band. This would ensure that the ITU findings about the critical DBS performance levels will not be violated, that the unavailability cap championed by the Commission and embraced by the ITU will not be shattered, and that the PFD limits for NGSO systems will not need to be renegotiated.

Two originals and two copies of this letter are submitted to be included in the above-captioned dockets.

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CERTIFICATE OF SERVICE

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